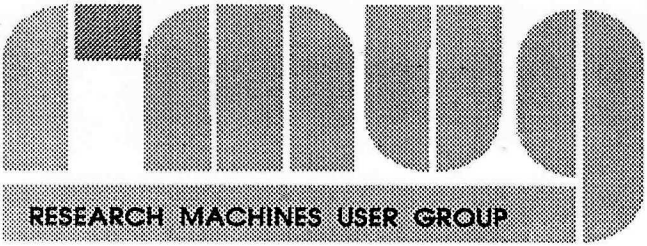
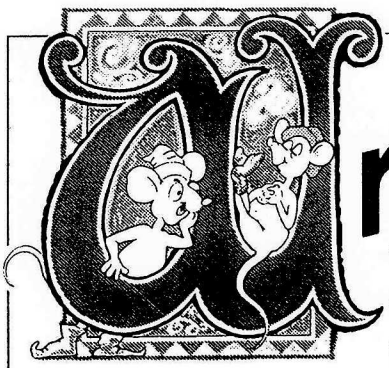
RM User

Volume 7:4

December 1992





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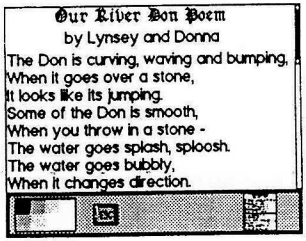
For the beginner . . .


Our River Don Poem
by Lynsey and Donna
The Don is curving, waving and bumping,
When it goes over a stone,
It looks like its jumping.
Some of the Don is smooth,
When you throw in a stone -
The water goes splash, splooshh.
The water goes bubbly,
When it changes direction.

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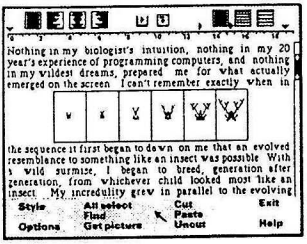
Nothing in my biologist's intuition, nothing in my 20 year's experience of programming computers, and nothing in my wildest dreams, prepared me for what actually emerged on the screen. I can't remember exactly when in
the sequence it first began to dawn on me that an evolved resemblance to something like an insect was possible. With a wild surmise, I began to breed, generation after generation, from whichever child looked most like an insect. My incredulity grew in parallel to the evolving
Style
All select
Find
Get picture
Cut
Paste
Uncut
Exit
Help
Options

- Variable margins and tab stops
- Formatting ruler display
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- Easy-to-use foreign accents
- Short cuts with function or CTRL keys

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(IBM requires colour EGA graphics)

SPA

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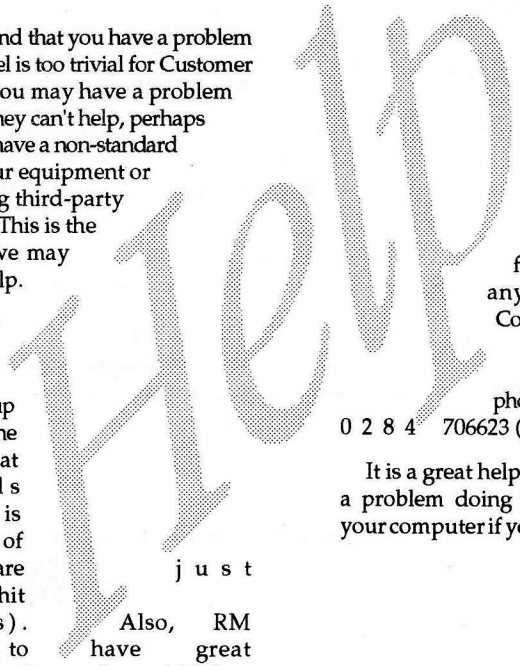
HelpLine

The User Group exists to help its members use the computers which they have.

Many of you (about 20%) are home users of Nimbus computers and we would like to help you. Mary Mabey is a home user who has kindly agreed to let us publish her phone number; you may call her at home on 081 698 7573 if you want some advice on using your computer.

You may find that you have a problem which you feel is too trivial for Customer Support or you may have a problem with which they can't help, perhaps because you have a non-standard setup for your equipment or you are using third-party equipment. This is the time when we may be able to help.



Remember that you can telephone the User Group members in the evening or at weekends when RM is shut (and, of course, you are just bound to hit problems). Also, RM don't claim to have great knowledge of products which they don't producesuch as Excel or PageMaker. They can tell you how to install the packages on their equipment and how to get started but they cannot be expected to give you in depth support on using the packages. We, on the other hand, can. Most of the people whose phone numbers are listed at the back are using the contents of the educational software library on a daily basis. We may have met exactly the problem you have just encountered.

If you are in difficulty, please feel free to ring anybody on the Committee (numbers at the back) and you may also phone Tim Phillips on 0284 706623 (home number).

It is a great help if you are having a problem doing something using your computer if you can be next to it

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Deadlines for the next issues

RM User 7:5 ..... 18 December 1992
RM User 7:6 ..... 5 February 1993

Two magazines?

For a trial period we are sending two magazines to those people who have paid the standard £15 subscription. We are hoping that you will give the spare copy to a colleague who might be interested in joining so that they can see some of what the User Group has to offer. Please let the membership secretary know if you do not want to receive a second copy (write to RMUG, Freepost, London W12 0BR or phone 081 740 5642)

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News and Editorial

Well, the Training Weekend is over for another year. Many thanks to Les Watson and Helen Williams for organising another successful weekend. If you were there I hope that you found the weekend as useful as I did and if you were not (and, unfortunately, most members can't get to the weekends) then I hope that you will find some of the articles in this magazine which contain information from the weekend's courses to be of use.

On page 12 of this issue you will find a report of Colin Watkins' talk but before he gave his personal view of the future, Barry Taylor and Phil Hemmings gave some information about RM. Some of this concerned the way the company will be moving in the future (to providing greater levels of service) but they also mentioned profits. There have been some worries about the state of a company which needs to shed so many staff so suddenly. It's worth pointing out that the company was in profit at the end of last year before an exceptional item (redundancy payments to 120 staff) and they expect to be in profit next year; not least because the high cost of maintaining a building in Oxford will go as soon as all the staff move to the premises in Abingdon.

RM have recently gained BS5750 Quality Certification. The BS5750 series of standards are desinged to provide a systematic means for companies to ensure quality for customers at minimum cost. The standards are widely recognised and required by UK and international business and government organisations. Certification covers the quality management of production and distribution.

I didn't have a full catalogue (or Technical Product Guide as it's now called) when the last issue came out so I hadn't seen all of the price changes. One price change which looked welcome was a cut in price and increase in performance for M Series Ethernet interfaces (from £200 to £129) but you have to buy a multi protocol boot ROM at £79 (and if you are upgrading a PC286 then you also need new firmware costing a further £19). Included in the price is the Windows Educational Workstation licence. I can't work out whether this is a good deal or not. The problem is that some things are bought in lots of sixteen and come with the server and others are bought in ones. I'm sure that I've paid for more than 100 licences for Excel 3 (even though I have less than 48 stations) because I paid for 48 licences with Net 3.1 and a further 64 when I moved to RM Net LM. If I buy another boot ROM then I buy yet another copy! Does anyone know if I can sell some of these spare licences?

RM Net LM has been RM's major software product this year with over 700 servers delivered during the summer, for example. It also looks like being a major part of their strategy for a good while yet. In a major test in Aberdeen it was compared over a period of 4 months with a standard Lan Manager setup and found to be more robust and reliable and also offered a better system in educational terms. As a result of this RM has won a contract from Aberdeen Grammar School for a system including more than 70 PC386 computers and 2 System Base servers.

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Unfortunately some sites (including your editor's) have experienced a number of problems (or "issues" as we are now to call them!) with RM Net LM. RM is committed to fixing all these problems and by the time you read this most sites will have received the second upgrade to RM Net LM which ***should*** solve most problems. RM has always had a loyal customer base because we have always known that they do fix problems but it is unfortunate that so many problems have affected such a major product.

Also on the subject of RM Net LM, I attended the first of my Insite seminars for network managers last week and found it to be excellent. The day was presented by Robert Green and David Brooks from RM, both of whom are thoroughly conversant with the product and presented a huge amount of information clearly, coped well with rapid questions (and even a couple of UAEs!). If you have not yet had an invitation to your seminar then do contact RM to find out when one is coming to your area; they are well worth attending.

On the hardware side it is worth mentioning again that the S Series is now the principal machine and is a very impressive computer at quite reasonable prices. Recently the computer industry has been going through a hard time because of the weakness of the pound; a number of manufacturers have announced price increases (some of Elonex's prices went up by 10% recently, for example). Normally, RM's strategy of only reviewing prices 2-3 times a year means that their prices stay high for longer than other companies. I hope that they can now keep them low for longer than others.

Customer Support is, at last, increasing its opening hours. I understand that they will now be open from 8.30 in the morning and I think there is a chance of them staying open until later in the evening. It looks as though we're stuck with the music and the "priority" message (on a phone line that has taken up to 20 minutes to be answered!) because these are blown in ROM and very expensive to change.

One of the exhibitors on Saturday evening was Daltek Distribution. They were showing a notebook computer called the Cruiser which has a detachable screen which can be used on top of a standard overhead projector to give a large projected image. The machine has a fairly high specification and can be fitted with a TFT active matrix colour display (currently the best type of colour display available for a portable computer). Prices range from £2300 for a 25MHz 386SX with 2Mb RAM and 60Mb hard drive to £5600 for a 33MHz 486DX with the same size drive and memory. If you need something like this then contact Daltek at 224 Walm Lane, Willesden Green, London, NW2 3BS (Tel: 081 450 3488).

Also shown on Saturday afternoon was the Rembrandt software. To describe this as a painting program doesn't really do it justice; it's easily the best graphics program I've seen on a PC186 (and, of course, it works on all of RM's machines using PC 186 mode). It's available from Newman software (Tel: 021 476 1181); see their advert on the inside back cover of this issue for more details.

Good suppliers are worth supporting; David Palmer refers to them as Heroes (as distinct from the Villains that we

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need to avoid). My hero this month is ILECC. The Inner London Educational Computing Centre now provides a number of services which can be bought by schools both inside and outside London. They offer courses based at their centre and on a customer's own premises, they give telephone technical support to subscribers, they provide servicing of hardware (although this is really aimed only at Inner London schools), they sell a range of software and also an assortment of consumables. It is the latter which I have bought recently. A faxed order for a variety of bits and pieces was delivered almost by return of post. Most of the items I could have bought from RM at about the same price but RM always take several weeks to deliver small orders; it's good to find a supplier who responds quickly. Print-a-Screen is an example of the small programs which ILECC produce. It's not very exciting, it just allows you to print a screen from any RM computer, but if you need to do it then it's invaluable. Its price varies depending on whether you subscribe to ILECC and how many machines you are going to use it on. The fourth pack of SMILE software has just been completed, giving a huge number of maths programs, again at reasonable prices. Contact ILECC at John Ruskin Street, London SE5 0PQ (Tel: 071 735 9123) for more information.

Aiming for Hero status is Technomatic. Corel Draw 3 keeps winning awards as the best drawing program and I've been waiting for the educational 10 pack to become available. RM list it in their latest catalogue at over £600 but Technomatic have it at just £440. It works on a network as well as version 2 did (which means that there are some problems with installation but basically it's OK). Hero status goes to Technomatic if they deliver faster than RM; contact them on 081 205 9558.

I've heard about another supplier with experience in repairing RM systems. Geoff Morgan at South Wales Computer Repairs currently handles repairs for Gwent schools and will take repairs by mail order for users anywhere in the country. Contact him at 120 The Moorings, Newport, Gwent, NP9 7JL (Tel: 0633 252306).

Health and Safety is an area which should concern all computer users. From 1 January 1993 new legislation is introduced covering the use of computer screens in all places of work. I hope to have more information on this subject in the next magazine but if you have not yet received a very informative booklet from RM then contact the Schools Sales Desk (0235 826868) to get a copy.

RM have won the National Council for Educational Technology's "Micros for Special Needs" award for their Window Box computer. Window Box is particularly aimed at providing a system which can be tailored for use by a number of pupils with differing ages and abilities. It includes special versions of Excel 4 and Word 2 so that pupils can have access to industry standard software from the earliest age. Window Box costs £1199 (the computer is a standard S Series PC386 with 4Mb of memory and 80Mb hard disc). RM will, of course, be at BETT (at Olympia in 1993) and they will be sponsoring the Special Needs village where Window Box will be on show.

The All Formats Computer Fair is a sort of glorious high technology

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car boot sale. That's probably a bit of an understatement but I'm not quite sure how else to describe it! They take place at a variety of venues (The Novotel in Hammersmith, Sandown Park, Donnington Park, City Hall, Glasgow, Leeds University, The Brunel Centre, Bristol, Haydock Park and the Northumbria Centre, Washington) giving a total of about 40 fairs per year. If you live near one of these venues then watch the local press for dates of shows. The adverts often have £1 vouchers and the stall holders sell a range of goods from top end 486 computers and brand new printers through various accessories and second hand peripherals to clearance software lines and books.

Lotus have again revised their prices for education. If you are not running a network (and, therefore, don't have RM's Educational Library) then Lotus products are well worth a look. Excel 4 seems to win more plaudits than 1-2-3 for Windows and Ami Pro 3 seems to tie with Word 2 for most reviewers but at the level at which most users work I really don't think there's much in it! The best deal if you are just starting out is the Lotus Smart Suite which includes 1-2-3, Ami Pro and Freelance Graphics for just £199 (there's also a licence for cc:Mail but if you've only got one computer this isn't much use). Lotus' Education prices are not just available to educational institutions but also to students on production of an NUS card. Contact the Lotus Brochureline on 0753 532443 or visit any Lotus Education dealer.

Some time ago I mentioned the Screen Artists disc called DANGER! Hot Stuff; a CD ROM with a mass of demos and graphics displays. Well, Hot Stuff II is now here. It costs £19.98 inclusive of VAT and postage from Ms Lorna McNutt at Screen Artists Ltd, 123 Westmead Road, Sutton, Surrey, SM1 4JH (Tel: 081 642 1370). There is nearly 400Mb of data on the disc, including a selection of graphics demo programs, some virtual reality demos, 135Mb of 3d Studio animations, 48Mb of pictures of all sorts and a freeware version of the ray tracing program Persistence of Vision. Great fun if you've got a CD ROM drive but nothing exciting to use it with.

Sherston Software have a range of new programs for the Nimbus, many aimed at young children. Included are two new adventure programs, Stig of the Dump and The Worst Witch, Christmas Allsorts (a marvellous selection of Christmas clipart in PaintSPA format), amd Nature Trails (a selection of environmental worksheets). Most of the programs have a resource book to go with them. For more information contact Sherston Software at Swan Barton, Sherston, Malmesbury, Wiltshire, SN16 0LH (Tel: 0666 840433).

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What did you do last weekend?

Fiona Morgan.

Well, if you missed this year's RM User Group Training Weekend, you missed one of the best events of this year's calendar. Not only did I learn a lot about computing and RM itself, I was also entertained and enjoyed a pleasant break for a weekend. Some of its many attractions included being cooked for and looked after, breakfast in bed, reassurances from RM, nostalgic looks into the past and ahead into the future of computing, helpful and constructive sessions on a wide range of applications, not to mention the intriguing quiz on CD-ROM and quite a few good looking guys.

The Novotel in Stevenage did a great deal to make us feel welcome and the accommodation and services were excellent. The food was pleasant enough and compared very favourably to the curry from the local take-away, which didn't taste quite the same after it had been reheated by certain enterprising delegates on top of the Overhead Projector. I still haven't worked out, though, why they chose a dolphin as the hotel emblem.

The presenters were all very capable and the sessions were, on the whole, interesting and informative, especially those on Word for Windows and Excel. RM were very helpful and not only did they provide a presentation on Friday night, they provided several members of staff who stayed throughout the weekend and as well as presenting a course on Net LM, they were also willing to enter into any discussions and take criticism as well as positive comments.

One of the themes of the weekend was "Computing in the Future", and from this ensued two very interesting talks. Colin Watkins' view into the future involved a small number of very large Computer Manufacturers and Software Houses. He also envisaged every student having their own notebook and simply connecting up to a school network if they want to access any large data banks on CD-ROM for instance, or use more specialised software. The following evening Roger Keeling took us on a journey into the past and into the realms of the 380Z and basic programming, which brought many memories for a lot of people, but I'm afraid that I'm not that old and can only vaguely remember a man sat in a bath and turning the taps on and off.

The CD-ROM quiz, which was devised by our delightful editor Steve, was straight forward in some parts and very devious in others. I mean who would have thought to convert miles into kilometres when trying to find a group of islands which are 200miles off the coast of Australia. However, I did learn quite a few things from the quiz (e.g. at Chernobyl they are now producing giant radioactive cucumbers) and found most CD-ROM's easy to use.

So, all in all it was a very constructive weekend and I would like to thank all those who were involved in the organisation and smooth running of the weekend, especially those who were prepared to carry kit around and set up the extensive networks.

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ITV Key+ Peter Stibbons

Report by Sheila Maynard

Key is a database handling package with a wide range of datafiles, an attractive feature being that it is possible to incorporate pictures and maps.

The aim of the team developing Key is that the emphasis should be on the educational applications of the package and data files. They do not want to encourage the use of computers just because they are there.

There is also a move away from supplying Key for only one make of machine, this is demonstrated by the availability of Nimbus 186 and Windows 3.1 versions. It is a little frustrating for RMUG members that the new developments are for the Archimedes with the other machines lagging behind. There are datafiles of maps and clipart under development but these will not be available for our machines just yet.

We did discover that Key+ will not run on a network and I hope this will be addressed before too long. In fact there also appeared to be problems with the Windows version in stand-alone mode. There are two basic Key packages, and you may need both if your establishment is like mine, Key for the 186 machines and Key+ for IBM and compatibles which requires Windows 3.1.

If you already possess Key and want the latest version you should ring the technical support hotline (061 476 5553) and you should be able to upgrade for no further cost.

The datafile packs which contain useful information and suggestions for Worksheets are freely copiable, The graphics included in the packs are simple drawings in the 186 versions but those for the 286/386 versions are much more sophisticated and some include scanned pictures. In the latter case the quality of display only depends on the hardware available. Using Windows means that graphics can be exported to other packages. The data is 'site licensed' and can be used in any way you wish provided you do not then pass any to another establishment.

This software could well be a useful tool in our search for resources to satisfy the National Curriculum criteria, the data packs provide many cross-curricular applications. However I cannot recommend it whole-heartedly yet while there are still technical problems to be sorted out. Our non-IT colleagues must have a package to use which runs smoothly and does not produce unexpected hitches.

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CD ROM - Mary Mabey

Report by Myfanwy Wallace

This session was led by Mary Mabey. She introduced us to many different types of CD ROM's. She was particularly enthusiastic about The Times and The Guardian CD-ROM's. These both had the same interface and were fairly intuitive to use. She felt that as a librarian it was not for her to learn a new interface for each CD-ROM.

In fact she was a champion for a code of practice for CD ROM development. Mary felt that they should have the same standard interface, with sensible indexes. That CDs, should be more than just a book put onto a word processor, but use hyper-text and all other available media. Mary believed that as a librarian she should be price conscious and equate the cost of CD's to the purchase of books for the equivalent amount of money. Mary considered that CD's were overpriced, even allowing for development costs.

She suggested that in a library, students should be requested to download their searches to floppy disks or to print out a maximum of ten lines of text.

Mary believed that with the right CD-ROM a valuable amount of information could be acquired in five minutes and with hyper-text, in a variety of media, in which the CD-ROM had the advantage over books.

Mary runs a CD-ROM user group and would welcome new members. Her address is Bacon's College, Timberpond Rd., Rotherhithe, London SE16 1AG.

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Looking into the Future - Colin Watkins

Report by Sheila Maynard

After the audience had been told that RM is now redirecting the focus of the company and that it will now direct all its efforts towards education, it was very interesting to hear some educated 'crystal ball gazing' by Colin.

The trend as far as hardware is concerned would appear to be towards greater speed and smaller units with bigger capacity in terms of memory and disks. There is not much change in I/O devices although pen devices are under development whereby input will be made using normal handwriting. In general it is likely that hardware will become cheaper. It is likely that it will become less diverse and that there will be fewer but larger manufacturers.

The three main areas of software which are operating systems, commercial applications and educational applications, may become less confused.

The future of the various operating systems is not yet certain. We have Microsoft and IBM facing up to each other at present, it would seem that Apple probably have a future with their system. We have others such as Unix and Risc OS which have specialist roles and we will have to just 'wait and see'. At present there is conflict between text based (DOS) and graphics based (GUI) user interfaces. Whether the two will continue side by side or whether one will finally win over the other probably depends ultimately on the preferences of users.

When one considers commercial applications it must be remembered that Windows based applications are large, expensive and difficult to support. This may well lead to a smaller number of large publishers rather than the diversity we have at present.

The future of educational software will decide on the decisions of the customers, of course. They may decide to work in Windows and use mainly commercial packages. There are also other packages developed to run under Windows, such as First Word and Starting Grid. However it does leave a question mark over many of the small publishers operating now for they face the same problems of expense and necessary expertise as the commercial software houses do with far less resources.

There are three main systems available to the customer who has the task of deciding on the appropriate one (or more than one?) for the job in hand. Firstly there is the network versus standalone issue. The network has the benefit of shared data, which may be CD-ROM, remote databases, E-Mail etc. Resources can be shared, for example printers, scanners and plotters. There is also the concept of a radio network which is under development. On the other hand the standalone system is easy to set up and management can be shared. The third consideration is the use of notebooks, should they be dedicated to a particular application or full function systems? It seems likely that education will want a combination of all these types of resource, networks forming the basis of the IT provision with the possibility of integrating standalone (or more likely, portable) machines as appropriate. This enables the use of shared resources

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such as printers by pupils who have prepared work on a portable machine elsewhere, perhaps at home.

Many issues will arise as the use and provision of equipment changes. Students may be encouraged to purchase their own machines. If so will standardisation, or the lack of it, present problems? How will software be provided, what will this mean for software licensing and access to shared resources like expensive peripherals. It may be decided that this situation would be too complicated to manage and the policy of permanent provision of equipment be adopted. This would mean students using a common set of machines removing the problems caused by a wide variety of systems. On the other hand there would be other issues of management to enable appropriate access times and level of provision for each student.

There will be a large management task whichever system is adopted. This is an issue which must be faced by the senior management of each institution if our students' needs are to be satisfied.

The increased use of information systems will change the methods of assessment of the work of a student. The information will be easy to obtain, for example quotes will be easy to access and incorporate in the student's work. Good presentation will also become easier. Hence it will be the student's use of the material which will become of prime importance. Analysis will increase in importance and the actual presentation and content play a smaller part in assessment.

In education the future would seem to promise networks with temporary connections to student machines but with no significant changes in cabling in the foreseeable future. The machines will be mainly student owned with some permanent facilities available resulting in a mixture of machine makes and types. There will be connections to internal and external databases through the network.

More commercial applications will be used with the emphasis on tools rather than curriculum applications. The number of software publishers will decrease and the remaining ones will grow considerably in size. This has already been seen in educational text publishing.

In summing up, the main points are that in education the IT systems will be bigger and much more complex, possibly more than 200 stations per school by the year 2001 and more than 100 software titles per school by the same time. The kit will be much more numerous and diverse leading to the situation where management will be a full-time job for a small IT department. Perhaps the most important outcome of all:

"More students will know when and how to use IT".

We all found this a thought-provoking and valuable session, our thanks to Colin for providing an opportunity to stop rushing around and consider issues.

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Adding Functions to Excel

John Williams

I remember the first time I saw Excel being demonstrated, I was sold on the "Paste Function" option. It was such an improvement on anything I had seen before, and the sheer size of the list of functions was staggering. How come I now want to add additional functions to Excel 3?

The answer is that Excel provides a general range of functions to cover most peoples everyday needs. If you need a really special one the facilities are there to write it yourself and add it in. An example might be functions to do frequently required conversions, metric to imperial, Fahrenheit to Celsius etc.

My special requirement was slightly more peculiar. If you haven't already noticed, Excel can do calculations on times and dates. If you look in the list of number formats you will see it includes, dd-mm-yy, h:mm:ss etc. I wanted to take times supplied in system time format (hh:mm:ss) and calculate the hours worked by someone on flexi-time. With a bit of fiddling I managed to get answers to appear in the form of d:hh:mm where each day was 24hrs worked. It was possible from this to convert to hours to two decimal places.

If I had tried to do the conversions at the calculation stage the formulae would have become unwieldy, so I decided that the time had come to add an new function.

Adding a function is just like writing a macro, you just have to follow a set of special rules. To create my function to convert hours minutes and seconds into decimal hours I created the following on a blank spreadsheet. The second column is comment, to remind me what it does.

Having created it I saved it as a macro (.XLM) and then again as an "add-in" (.XLA). You can't see "add-ins" when you open the file so you can't fix it if it's wrong.

To use my new function I opened my newly saved add-in and checked on the Paste Function list to see that hrs_dec( ) had appeared. Then I created the trial spreadsheet shown on page 16.

The macro sheet

	A	B
1	hrs_dec	Function name to appear in list
2	RESULT(1)	1 = return a number
3	=ARGUMENT("time",1)	The argument of the function is a number, call it "time"
4	=HOUR(time)+MINUTE(time)/60	Use HOUR and MINUTE to calculate decimal hours.
5	=RETURN(A5)	Tell macro to return what we did in A5

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	In	Out	In	Out	Hrs Wrkd
Mon	9:05:00	12:21:00	13:00:00	16:48:00	
Tue	8:52:00	12:05:00	12:46:00	17:01:00	
Wed			13:02:00	19:05:00	
Thu	9:04:00	12:42:00	13:17:00	16:48:00	
Fri	8:58:00	12:32:00	13:15:00	16:30:00	
				Total	

I inserted the following formula in cell F2

=hrs_dec(C2-B2)+hrs_dec(E2-D2)

Copied it down to rows 3:6, and put a formula for the total in F7

=sum(F2:F6)

Finally I formatted column F to be two decimal places.

	In	Out	In	Out	Hrs Wrkd
Mon	9:05:00	12:21:00	13:00:00	16:48:00	7.07
Tue	8:52:00	12:05:00	12:46:00	17:01:00	7.47
Wed			13:02:00	19:05:00	6.05
Thu	9:04:00	12:42:00	13:17:00	16:48:00	7.15
Fri	8:58:00	12:32:00	13:15:00	16:30:00	6.82
				Total	34.55

It worked! I can now let my new function loose on a file of times captured by a program written in QBasic and saved as a CSV file. Why did I do it?

Well this way those who "clocked in and out" by entering their Flexi-time code on a spare computer, can see the times in hours and minutes and get the total time worked in decimal hours, which is the form needed by our administration.

If you save the .XLA file in the XLSTART directory then the addin is loaded when Excel starts and the function is added to the list of functions, just like all the standard functions. I've written a function called ROUNDUP which rounds a decimal number to the next integer up (there is a standard function which does something similar but I think mine is simpler to use). Have you written any functions which you would share?

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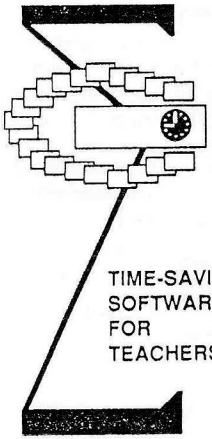

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NETLOG

Have you ever wished that you knew who had logged onto your network, on which machine, when they did it, and how long they were logged on for? If so, then NETLOG is possibly the answer to your needs. NETLOG maintains a log of currently-active users, and also writes a historic log containing all pertinent information about the session, even including the type of software used, if required.

Cost £25 per network.

A New Use for Print-Merge

John Williams

If you're not suffering from an attack of NetLM you may wish to skip what follows.

Being an awkward cuss I insisted in putting my users into a tree structured directory. The User Manager struck back by adding permission for all users to read each others files. To make it worse I didn't spot this until many users had created their own sub-directories, each with the same permissions as their parent.

If you think you might be suffering form this problem, here's how to check.

Go into DOS and change to R:

Assuming you have users in a sub directory called sub type:

net access r:\sub /tree

You will get a print out that looks like this if the problem exists:

```
r:\sub\user1
 *USERS:RX
  USER1:RWCXDAP
r:\sub\user2
 *USERS:RX
  USER2:RWCXDAP
```

it should look like this:

```
r:\sub\user1
 USER1:RWCXDAP
r:\sub\user2
 USER2:RWCXDAP
```

The long-winded way to put this right is to type

```
net access r:\sub\user1 /revoke
  users
net access r:\sub\user2 /revoke
  users
```

Note that each net access should be one long line with enter pressed after the word users.

Now this could get a bit boring. Steve Rochford wrote a program to generate a batch file to do it, but I wanted to have a bit more control of what happened, so here is my solution.

I repeated the net access command but redirected its output to a file; using the example above it would be:-

```
net access r:\sub /tree >
  users.lst.
```

The file users.lst will look just like the lines above.

```
r:\sub\user1
 *USERS:RX
 USER1:RWCXDAP
r:\sub\user2
 *USERS:RX
 USER2:RWCXDAP
      etc.
```

I removed all of the lines with the permissions and left just the directories. I could have written a macro to do it, but using one hand on the mouse and one finger on the del key I could look at each line in turn and make a note if there was any other problem. I ended up with:-

```
r:\sub\user1...
r:\sub\user2...
etc.
```

and used find and replace to lose the spaces on the end of each line.

At this point our old friend Murphy struck. The \ character gets lost during a mail merge, so I replaced them all with stars and added a field name to the top line:-

```
dir
r:*sub*user1
r:*sub*user2
etc.
```

then re-saved the file.

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My next step was to create a one line file:

```
net access /revoke users,
```

attach the data file users.lst and insert the single field

```
net access «dir» /revoke users
```

and merge print it to a new document that looked like this:-

```
net access r:*sub*user1 /
  revoke users
net access r:*sub*user2 /
  revoke users
      etc.
```

Then I replaced all * with \. Finally I saved it as a text only file called FIXIT.BAT.

It worked! When I ran the batch file I got a lot of "Command completed successfully" messages and a final check with net access proved that the *USER:RX permissions had gone. Positive proof that all was well came from the second year computer studies students who moaned that they could no longer swap files with each other.

This is a nice idea of lateral thinking! Remember that just because it's called Print Merge doesn't mean that you have to print it and you certainly are not restricted to merging letters. Have you found other uses for the Merge function?

*The business of file permissions is what makes it possible for Lan Manager to be extremely secure but also can cause much grief. The first thing to realise is that file permissions and file attributes are not the same thing; it is possible for a file to be read-write as far as DOS is concerned but Read Only to a particular user (and vice versa). This is the way in which Drive P: is a read-write drive to the admin user but read-only to all other users (because access rights have been set to read-only for the group called *USERS which includes everyone except ADMIN). If you want to have, for example, a file available to all users in Superbase then with Net 3 you had to put it in a special directory to which you made a special connection; all very confusing. With RM Net LM you put the file anywhere you want (eg P:\RMLIB\SB) and then use NET ADMIN at the server to alter the access permissions to give RW access to the group *USERS. This takes place in real time so you don't have to reboot the server or set up complicated batch files to allow connections to this directory.*

I don't know whether the problems John had are a feature or a bug. I do know that he's not alone in finding that each user's files are suddenly available to all users. All I can suggest is that if you make any changes to the directory structure then you should do a net access as described to check that things are as they should be.

There's more about access rights in my notes on the advanced RM Net LM course which took place at the Training Weekend.

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RM Net LM - Advanced Network Management - Tim Nash

Report by Steve Rochford

What follows is a series of notes on topics concerning RM Net LM; it's probably best to read the whole lot and hope to absorb some of it!

The drive mappings:

User ADMIN has a large number of drives, L:, M:, N:, O:, P:, Q:, R:., S:. T: and U: by default. They are:

L: the network administrators own directory, used for executables (and with a number of sub-directories for specific machine types)

M: is the root of all group directories

N: is another directory for ADMIN's use; it does not need to contain anything but I use it for storing "my" files (the list of all station names and locations is here, for example)

O: is the boot directory - it holds the files from which a station boots. Don't touch it unless you know what you are doing!

P: is the public directory. Note that an administrator has read-write access to the files in this drive (unless they are specifically ATTRIBed to be read-only) but users, connecting to the same drive have only read-only access. By default, the connection is made to drive P: after you have logged on (because a connection to drive P: is a public connection set in User Manager). On a multi server network, it makes sense to make the connection to the nearest server, splitting the load evenly - see later for more on multiple servers. To do this, make an extra drive connection in Station Manager for each station so that drive P: connects to the public offer on the nearest server. You can then use User Manager to remove the connection to drive P: at public level. Be warned that if you do this a new station will not boot (because it needs to make a drive P: connection and it can't - see later for how to register one station from another station)

Q: is the group directory for the group you have joined at logon (it will not exist if you did not logon to a group).

R: is the root for all users' home directories; eg if a normal user sees their home directory as N:\FRED then you as admin will see it as R:\FRED (by default, R:\ADMIN.001 is the same as N:\ADMIN.001)

S: is the root for all the stations' TEMP directories; RMTREE DEL S:*.* /E /R /H when no-one is logged on will clear all the garbage (but each station does it at logon, anyway, so it should not be a problem)

T: is the station's own TEMP directory and Must Not Be Changed

U: is the system directory - this is where Windows and DOS are stored and Must Not Be Changed

Each of these drives (except for P:) is actually a sub-directory under C:\LANMAN\RMNET on the server. If it is essentially a user directory then it is in the USERS sub-directory from here; if it is a station directory then it is in WKSTA. L: is the ADMIN directory from here. P: is actually C:\PUBLIC.

The boot drive contains the files that are needed to start a station. If you go far enough down the tree on drive O: you will eventually come to a DOS310

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and DOS500 directory and then in each of these there is, eventually, a group of three directories, DOS, SYS and LANMAN.DOS. The first two are identical to the ones you are probably used to on RM's boot floppies or the way the hard discs are set up (the first containing executable files and the second containing device drivers). The LANMAN.DOS directory contains a very important file; NETLIST.INI contains the list of all the station addresses (in address order) and their names, together with a list of programs that they should load when they start. You should not edit this file (and you should note that it is the same in the DOS500 and DOS310 directory and is replicated automatically across servers by Station Manager). It is actually a copy of the file a few levels further up which is written by Station Manager at the same time as NETLIST.ACC.

Station Manager is, I believe, much more reliable now than it was but it is still a Very Good Idea to copy the three NETLIST files from O:\DOS500\SYSTEM to the BACKUP directory after every few stations added, just in case! If something then does go wrong then you just copy back the files from the backup directory and re-instate the last few stations. It's worth pointing out that you don't need to be at a station to register it; you can clone the station that is like the one you want to register and then simply type in the details of its address and name (just switch on the station and let it start to boot; if it is not registered then it will pause with the address on the screen). The only time I had problems with this was registering an AX with a mono monitor, in spite of cloning the mono X series example.

The file called FILEMAP in O:\DOS500 (and O:\DOS310) has lines like:

```
map sys\rmmceth.dos sys\rmmcznt.dos
cardtype 80
```

This tells the system that when a machine with network card type 80 asks for the first file then it should actually be given the second file; this file also handles the mapping for the different CONFIG.SYS files When DOS starts on your machine it knows nothing about networks, it just knows that it wants to read CONFIG.SYS. This system allows the server to pretend that the file called CONFIG.SY9 is really CONFIG.SYS when asked for by a PC386. It also allows you to set up a file for a specific machine to use as CONFIG.SYS; you might want this if a machine had a scanner attached, for example. In the Technical Help, follow through from setting up stations to a station with extra equipment attached and read this carefully to get an idea of what you need to do but DO NOT DO IT; you will crash your server. Instead, read the Tasks help - follow from stations to change the software loaded on a station to add a device driver for the station. This tells you how to do the job using MAKECSYS. (You can use the suggestions in the Technical Help but you MUST type NET PAUSE RMBOOT before you start editing FILEMAP and then NET CONT RMBOOT afterwards; this is part of what MAKECSYS automates)

If you do have to re-instate a backup then the next time you run Station Manager (on a multi server) network, it will recognise that the databases are out of synchronisation and ask

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which is the master; it makes sense to choose the one on which you are currently working (and this is the kind of job that you really shouldn't attempt with any users logged on!) Choosing a name for the temporary directory is simple on a single server network; I use the same name as the station (which is guaranteed unique) but the name should be unique across a domain. The simplest way of ensuring this is to use the last 8 digits of the station address (starting with 7B). All ethernet cards must have a unique number (and this is set at manufacture and not changeable) and Z Net cards have a "fake" address of the same form so you can use this for all machines without problems.

The options section of Station Manager allows you to specify what software loads at startup; the normal option is to go for U:\W30\RMWIN.COM (which in turn calls up the RM Windows Network Access program (RMWNA.EXE) which actually handles logon). If you don't have the DOSLOGON pack then this is the only sensible option for now; Windows 3.1 will start in a similar way - but not just yet.

It makes a lot of sense to make the connection for LPT1: at station level, rather than in User Manager. This is because most software, especially DOS software, will print to LPT1 and you will normally want to print to the nearest printer. The latest support notes go into some detail about how best to set up a local printer (and it is now much easier); all I can say is that I want to also set LPT2: to point to the nearest quality printer and LPT3: to the nearest colour printer but I've run out of connections in Station Manager... Back to the drawing board for now but future releases of Station Manager may support more than 4 connections at station level.

If you are trying to get back just a bit more memory then you can safely get rid of Winpopup (I'm sure it has got a value but I'm not quite sure what it is...) To do this, delete the MSRV.EXE and NETPOPUP.EXE lines in Station Manager and the Winpopup line in CD.RMI (incidentally, CD stands for Colour Display!) Note that you can allow messaging to certain stations if you leave the programs there for just that station. There is more memory available for DOS sessions now that update 1 has been released; in particular, S Series stations now load PC186 mode support only when it's needed. Even if you only have M Series stations, it is worth loading the S Series upgrade because this bit is of benefit to both kinds of machine.

Another program that loads at startup is XPRTSC; this is the program that handles CTRL ALT PRTSC to close spool files for applications that don't print until you quit (or press these keys) If you have no such applications (or they don't respond to these keys) then you can delete this program.

There are two sets of programs that you can edit; pre-station startup programs are run before a connection to a server is made and post-station startup programs are run after the connection. In general, make all your programs post-startup (except for SPLINIT in Spool+)

Having just about got a reasonable amount of memory back CD ROM is now available for RM Net LM; this takes just over 30k so if you are really short of memory you may consider doing without it on stations that won't

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need it. Notice that you also need to install routing if you are using CD ROM and this also takes some memory from a station. The installation suggests that you should overestimate the number of stations on the system to allow room for growth. While this is true, each station has to allocate some memory for every station that could possibly be on the network. It makes sense, therefore, not to overestimate the number (it is changeable later). Although a shared printer could be attached to a CD ROM server it is not a good idea to do so (not least because the CD ROM server is ideally locked away somewhere and its printer would not, therefore, be accessible). Although a dedicated CD_ROM server is now essential with the OptiNet software to communicate with it, it is possible that in the future CD ROM will be a service provided by the server, perhaps saving quite a bit of memory for the station. If you do have only one server and one CD ROM server then they do not need to go on a "back-bone" cable. It's worth noting that although PC186s are currently supported for CD ROM they are probably not worth using because they have too little memory and an increasing number of titles expect a minimum of VGA graphics. On the subject of memory, if you type MEM / C at a DOS prompt you will get a list of the programs that are currently loaded. It's worth looking at the programs that are there and, if you put them there yourself, deciding if they could go. One that can't, and is unfortunately quite big, is RMDEVICE. As standard the network does not load the DOS mouse driver. I included it in CONFIG.SYS because I use a number of DOS programs that need it. If you hardly ever need the mouse in DOS then don't add it to CONFIG.SYS but load it in the MTSL script; you need something like EXEC HILOAD.EXE /V /Q MOUSE.SYS (the /V tells Hiload that the program is a device driver, the /Q tells it not to report an error if there is insufficient upper memory available)

The whole business of where to put drivers is something of a nightmare; some files may be reported by MEM as only taking 4k but won't fit in the 4k of available upper memory. Some files may fit in upper memory if you load them in one order but not in another. If you are desperate for a few more kilobytes of DOS memory then you can experiment using the MAKECSYS program but it is advisable to change the CONFIG.SYS file for just one station. That way, if you get it wrong you can use another station to put it right!

The latest version of User Manager supports DOS Logon and requires you to enter a line for the DOS shell if a user is to be able to use DOS (remember that stations are set to start either DOS or Windows but if a user is not given a DOS shell then they won't be able to logon at a DOS station).

Multiple server networks are another Very Good Idea. This may seem frighteningly expensive but you can use quite small servers to hold the public software and then one huge server for the users and their files. Provided that the servers are linked via a backbone and routing is installed then everything will work. Set up groups of stations so that they will boot from a small server and use Station Manager to make the P:

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connection to this server. Specify in User Manager that the user accounts are all on the same server (this is the default) and you should get increases in speed; the big files are now split across servers so that no server is exceptionally busy and users' files are generally much smaller than the programs that load them. If you do have multiple servers then one has to be designated as primary domain controller. If you do have to turn the servers off then this is the one that must go off first and come on first. (If you turn off the slave servers first then it's just possible that the primary controller will make some internal changes and try and broadcast them to other servers that will not receive the information.)

Yet another Very Good Idea is to put all the servers in a "Data Centre" and then run cable from there to any room where stations are needed. It used to be necessary to run long cables by using fibre optic cable or thick Ethernet but thin cable repeaters are now relatively cheap and make the job much simpler. RM are hoping to reduce most standard cabling to kits; you buy lengths of cable and repeaters and just get any competent electrician to put it in ducts, etc. Note that the IEEE 802.3 standard for Ethernet says that you can have up to 5 segments with repeaters between them and each segment can be up to 185m long. You are only allowed to put stations on 3 of the segments (and not more than 16 per segment). If possible you should aim at as few stations as possible per cable segment. Another Very Good Idea, therefore, is to have as many network cards in the server as possible, each with a few stations on it.

OS/2 and Lan Manager support the concept of Access Control Lists; these are lists "attached" to a file that specify what users can do to a file. The whole of the public directory, for example, is set to be *USERS:RX. This means that the group USERS (which includes everyone) can Read and eXecute the files but cannot do anything else. (ADMIN has full access to all files, hence the read-write access to drive P:). One of the files that has special permissions set is COMMAND.COM. This is set so that only members of the group DOSUSERS can read or execute it; no-one else can even see it. Note that DOSUSERS is a standard Lan Manager group and not one that needs to be chosen at logon time. If a user is not a member of DOSUSERS then they cannot run COMMAND.COM (and cannot run many CD ROM titles that need access to this program). This is something of a problem; I thought that RM Net LM at last got away from the hackers who get to DOS by a number of devious routes. If they need access to COMMAND.COM to run legitimate programs then they will get to DOS at will. A possible solution to this is to put COMMAND.COM in a separate directory and offer this specifically as a share. An MTSL that needs to access DOS will then connect to this drive and include it on the path at the start and then disconnect from it at the end. I haven't tried this yet (I don't have a working RM Net LM server!) but it should work.

In the directory C:\LANMAN\ ACCOUNTS there are two files; RM.ACC and NET.ACC. The first of these contains data about the user that is specific to RM's implementation (things such as there DOS logon shell and access to E Mail), the second contains all the standard Lan Manager information. You can directly edit the second file using NET ADMIN at the server but it is a Very Good Idea not to

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do this! User Manager will recognise that the two files are no longer synchronised and may or may not recover gracefully. Note that you cannot directly backup the NET.ACC file (OS/2 holds it permanently open) but BACKACC makes a copy of it that will then be backed up by your backup software. BACKACC should be set to run daily using the AT command (and see support notes 3 from RM for more information about using AT to alter the times from 12 noon to 12 midnight; do you think someone didn't know the 24 hour clock when they set up the times?) NET ADMIN allows you to set some things that cannot be set using User Manager; for example, you can set passwords to expire after a certain period. Although this seems like a good idea because many of the security problems I have are because some people choose an obvious password and never change it, it should be avoided. The problem seems to be that Lan Manager will then quietly change the password needed for stations to boot but they have no way of knowing this so they cannot boot! It's also not a good idea to enable global auditing; Lan Manager generates HUGE audit files that quickly become unmanageable and, to be honest, tell you very little.

When Windows is being started it expects to find WIN.INI on drive T: and the copy that is put there is specific to that station (so, for example, if you set a specific SYSTEM.INI then you can add bits to this that will be added to WIN.INI). When you log on as a user, the system decides whether you need a different WIN.INI by looking for a file called USERWIN.INI in your own drive; this is what takes some of the time to go from typing in your id to getting Program Manager on the screen.

The first WIN.INI is built from files in U:\W30\RMWIN - RMWNA\CD.RMI, SYSTEM\DEFVGA.SYI and WINDOWS\DEFAULT.WNI. The second file is essentially SYSTEM.INI and is read first to find the machine type. If this is CD (Colour Display) then the CD.RMI file is read (and it would be possible to put a different file there). This file contains machine specific data. The section under [Wksta Startup] contains programs that are run when Windows starts, such as Netpopup. If you really want Solitaire to start when the machine boots then you could add PROG2= U:\W30\SOL.EXE; but this is not a Very Good Idea! The final file contains application specific bits; this is where you would add lines that are needed by Windows applications; eg

```
[Terminal]
Port=COM1
```

The rest of WIN.INI is information about printers. This is made by adding in all the printer INI files which are in C:\LANMAN\ACCOUNTS

The rather dense text above are my notes from a 3 hour session on Sunday morning; some of it may now be out of date because Update 2 should reach you after this magazine goes to the printer but I hope it will give you a good idea of what's going on. My thanks to Tim for an excellent session.

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Technical Tips

Stephen D. Sharrad.

In another instalment of Technical Tips (or, "Tacky Tips," as my brother calls them), I hope to explain some more solutions to some of the problems I have encountered, or some suggestions which I have found useful when using RM equipment.

Ye Old Spooler

Research Machines, as we all know, is dedicated to the quality and reliability of its products, and its consumer support. Indeed, many RM Users are still using 380z's or 480z's, some as standalone machines or on the CP/ Network Operating System (480z), which are still going strong. In thinking about this I was reminded about an old phenomenon that was encountered at my last school. The problem was this: Some programs on the 480z were written in Basic and from time to time they needed to print. However, the printout only use to appear after the machine finished running that program i.e. after exiting from Basic. This was a pain, especially when more than one printout was required.

The cure? When Basic sends a document to be printed on the server (in this case a Nimbus PC-186 with one of the old, large (and heavy!) beige 20MB Winchesters, in the style of a 380z), a spool file is created on the server. A print spooler allows more than one file to be sent to the server at a time, but the Basic files in question did not appear until as mentioned. What happened was that the file Basic sent to the server was not CLOSED. The server will only print it when Basic closes the file, giving the server an all clear signal. So, the way round it was to, if you wished to remain in Basic, was to exit to Basic and enter in the CLOSE command. The file will then be printed as soon as possible by the server.

Pipes

No, I am not talking about drainage systems. A pipe (shown as |) is a function in DOS which is sadly not often used. On your distribution/ System disk you will find the file MORE.COM, and I will show this as an example.

If you wished to quickly view a file from DOS by using the type command you may simply do this:

TYPE BOB.DOC <Enter>

However, if BOB.DOC is more than 20 or so lines long the computer will scroll through, not allowing you to read the first part of the file before it vanishes from the screen. Your may press PAUSE or CTRL S when viewing the file to halt it but this sometimes doesn't work as the computer does not always respond to CTRL S. An easier way, allowing you to view each screenful at leisure, is to use MORE.COM in conjunction with the Pipe Symbol. An example is this:

TYPE BOB.DOC | MORE <Enter>

The computer will read the file BOB.DOC but it will also consult MORE. You will now find that at the end of one screenful a message appears at the bottom of the screen telling you that there is more, and to view it you must press a key. So now you can view your file page at a time.

Pop-Up

In the last issue of RM User, on Page 34 RUNPC186.COM was mentioned.

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The notice that comes up after finishing with an application tells you to press CTRL-C to continue. In fact, it is not just RUNPC186.COM that does this. Any large program, that likes to do things with a lot of memory, will do this. An example of this is PC Paintbrush (on a PC-186), by ZSoft, which when used under Windows 3, tells you to do the same thing. The notice, though, is harmless. My explanation of it is this the application you have just used has not all been cleaned out of memory when it returns to Windows which basically means part of the application is still being retained by the computer's memory. (In the case of PC Paintbrush this is a small program called Frieze which handles the printing of pictures. Frieze is not removed from memory. when Paintbrush terminates. An analogy of this might be a litter-bug, leaving rubbish behind. The rubbish has to be removed.) Windows treats these applications as pop-up or Terminate Stay Resident programs. Windows asks you to press CTRL-C so that it can return to Windows properly and clean-up the memory needed.

There does not appear to be any easy way to remove the notice from coming up but it should not cause you any problems.

Format Problems

Users of different types of Nimbuses (like me...By the way, do you say Nimbi as plural for Nimbus or Nimbuses?) probably recognise the difference between the disks that the individual machines use. The PC-186 uses 720k double-density 3.5" (or 5.1/4" if you happen to have one; the PC-186 WILL read single-density 360k disks), but the M series and the new S Series use high-density floppies. (For those who need to know, the difference in the actual physical disks is that the plastic coating layer in the high density disks is actually stronger and of better quality (and therefore more expensive, and the difference to the computer is that double density drives format to 1440 sectors while high density format to 2880 sectors.)

The problem comes when users, using different machines, want to take files in between the different types of machines. It is all right if you wish a 286 or above to read PC-186 disks, because the 286 is downwardly compatible respecting this, but, of course, PC-186's will not read high density disks from a 286.

So what happens if you're working in your RM S Series PC-386 and you realise you have only unformatted disks on you but you want to take a file you need to save a file on the disk that can be read later on by a PC-186, but a PC-186 is not readily available at that moment? If you have DOS 4 or 5 on your machine, here is the answer. (To find out which DOS version you have, type VER at the DOS prompt. All new computers from RM come with DOS 5.0; older M series machines came with DOS 4.01 and very old X series machines came with DOS 3.3)

Conveniently, the DOS FORMAT command allows you to format on your machine to double density although not all users know this.

An example of this would be:

FORMAT x: /T:80 /N:9

X is the drivename you wish to format. The number after T is the

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number of tracks and the N is the number of sectores On DOS 5 you can use FORMAT x: /F:720 which is easier to remember; the Formatted disc holds 720k.

You can also add /S after the command; this makes the new disk a system disk (copying IBMBIO.COM, IBMDOS.COM as system files and COMMAND.COM across to the new disk but there is no point if you are preparing the disc for a PC186 as it cannot read this system.)

There are many more interesting options, or "switches" to the FORMAT command in DOS 5, experiment with them if you wish but be careful you do not format a disk you do not want to be erased! This /F switch allows at the moment for the standardisation of format density throughout a school where 286's or above are in a minority and the PC-186 is mainly used, but of course, as technology advances the situation will be transposed.

Finally, I would just like to thank Steve Rochford (Editor) for his continuing hard work and efforts in producing each RM User. I enjoy each issue of RM User so much I just can't wait for it to arrive in the post!

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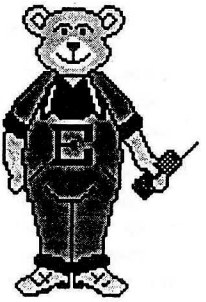

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Micro Mart

For Sale:

PC186 Primary Turnkey system, approximately 1 year old, with 20Mb hard drive and colour monitor. £600 - open to negotiation. Please contact:

Keith Miller on 0634 374832 or write to 42 Hinton Crescent, Hempstead, Gillingham, Kent, ME7 3RN

For Sale:

Surplus to requirements

200 plastic 3.5" disc mailers (hold 2 discs each) at 90p each plus postage.

1000 225x120mm Jiffy bags (hold 1 disc each) in boxes of 200. £12 per box.

Free!

RMLOAD - a utility which will reduce 99% of standard RM Net batch files to just one line, a call to the RMLOAD utility. Just send a formatted disc and an SAE to me at the address below for a copy of RMLOAD.

For both above items, please contact:

Giles Kingdon on 0272 864751 or write to Wellsway School, Chandag Road, Keynsham, Bristol, BS18 1PH

Wanted:

By student in distress! Any unwanted or cheap software for a Nimbus PC186 or software that will run under SETPC emulation; anything considered. Please contact Stephen Sharrad at 10 Gainsborough Hill, Henley-On-Thames, Oxfordshire, RG9 1ST or please phone 0491 577149

Wanted

A Chain 16 server (380z style) to replace one which has "packed in". If you have such a server, perhaps lying unused in a cupboard, then please contact:

Sturart Stockley at Highfields School, Boundary Way, Penn, Wolverhampton, WV4 4NT. (Tel: 0902 343948)

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The User Group Survey

All our members!

Issue 7:1 of RM User came with a membership survey form; these have been analysed by the Williams family and the results are presented below. The Committee would like to express its thanks to those members who took the trouble to respond. In total more than a third of members responded which is excellent (many magazine's readership surveys get just a few percent returning forms!)

The results are presented with the question in short form and then the results as percentages unless otherwise stated. Note that "No reply" figures have been omitted and account for the fact that the numbers don't total 100%

How long have you been a member?

<1yr	1yr	2-4yrs	5-10yrs	>10yrs
16	9	38	27	10

Is your membership personal or for work?

Personal	24
Work	75

Is your subscription paid personally or by work?

Personal	29
Work	70

How many training weekends have you attended?

0	1	2	3-5	>5
73	13	6	6	1

How many meetings have you attended?

0	1	2	3-5	>5
64	17	8	6	4

How many times have you used the software library?

0	1	2	3-5	>5
80	13	2	4	1

Do you know what is available in the library?

Yes	No	Think So
9	53	38

How many times have you used the Help Line Network?

0	1	2	3-5	>5
74	12	6	5	2

Do you think this is a useful service to members?

Yes	No	Don't know what it is
79	16	16

Do your children use RM computers at school?

Yes	Some	No
32	3	22

(Note a no-reply figure of 43%; presumably members without children at school)

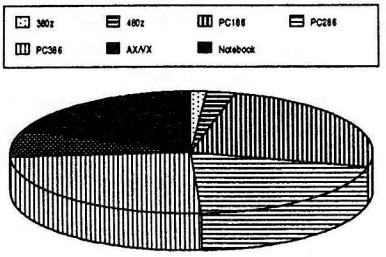
Do you use a computer at home?

Yes	No
85	9

Is it an RM computer

Yes	No
53	33

What kind of RM Computer?



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Is your home computer provided by your employer?

Yes	No
27%	55%

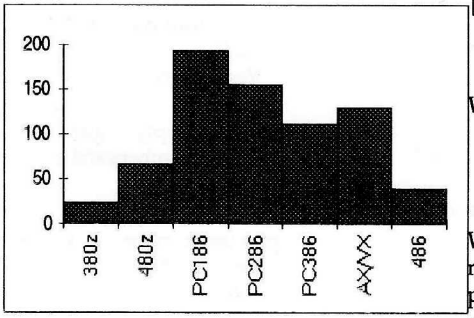
What type of establishment do you work in?

School	Other Ed.	Co.	Self Empld.
74	22	3	1

Does your work use RM computers?

Yes	No
94	5

If yes, what models?



Would you stand for the User Group committee?

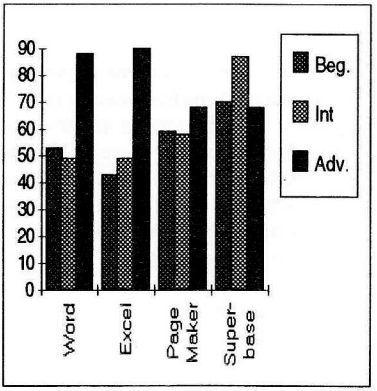
Yes	No	Maybe
7	61	31

(and if you were a "Yes" or "Maybe" answer then *please* contact us before the AGM next March to let us know that you want to stand; it doesn't matter if you can't make actually make it to the AGM, all help is welcomed in running the User Group)

Would you be interested in the training idea?

Yes	No	Possibly
43	11	45

For which software and at what level (Beginner, Intermediate or Advanced)?



What course length would you prefer?

Whole Day	Half Day
59	20

What would you consider to be a realistic charge for one day? (prices in pounds and headings abbreviated; ie <20 means "Greater than £10 but less than £20")

<10	<20	<50	<100	>100
36	8	37	12	6

What is the maximum you would be able to pay for one day? (headings as above)

<10	<20	<50	<100	>100
44	6	32	9	9

The figures make interesting reading; we are looking at the feasibility of arranging some one day courses for members but it is unlikely that they would be as cheap as many people would wish.

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How many others, on average, read your copy of RM User?

0	1	2-3	4-5	>5
25	30	37	5	2

The next set of questions asked about the usefulness of the contents of RM User. Most of your subscription goes towards producing the magazine so we feel that it is quite important that we get this right. There were 12 headings and you were asked to rank them; a number of people felt could not do this and simply ticked the most important headings; we've tried to take this into account. Listed below are some numbers that stand out - I don't think it helps to print the whole table (knowing, for example, that one person ranked members' letters as twelfth most important doesn't tell us very much).

15% ranked IT in the classroom at number 1, 40% put hints and tips, 19% software reviews, 35% network management and 17% news about RM products.

In second place, 15% put RM products, 15% for RM developments, 18% for Software reviews, 16% for hints and tips, 21% for network management and 10% for IT in the classroom.

I'd like to think that that nearly matches what I put in the magazine but, in hindsight, it's obvious that we left out one question - Please rank the magazine as a whole on a scale of 1-5. I'd like to think that the fact that a large number of members keep renewing their membership means that you do think that it's OK; do **please** let me know if there are areas that you don't want including in the magazine or if you do want more emphasis on certain topics - but remember that as it says elsewhere in the magazine, this is ***your*** magazine - if you don't send me anything then nothing gets printed!

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CD ROM - Jack Kenny

Report by Steve Rochford

Jack presented a fascinating session on the use of CD ROM with plenty of time for discussion and experimentation. We spent some time considering the importance of the search software which comes with some databases; there is no use in having excellent data if it is hidden behind "barbed wire" search software and we also looked at the importance of lateral thinking when carrying out a search. Jack tried to get us to find a report in the Times of an attack on Mrs Thatcher during the 1992 election campaign. This took us quite a long time because we weren't very good at considering alternative search strategies (just searching for articles including Mrs Thatcher is no use because she appears too often and many times she is attacking someone else at least verbally!)

Jack suggested many ideas for using CD ROM, many of which are listed later. He also talked about the way in which the data can be made available in schools. One option is to have many standalone machines, each with a drive and another is to have networked CD ROM. A third alternative is to use the Longman Logotron program called Hyperbook to create your own hyperbooks. This is very easy to do; you can, for example, use most CD ROMs to create a straight ASCII file of the results of your searches. Hyperbook will then index all this text and present it in a way that can readily be searched without the CD being present. This also has the advantage that you then have the same search software for data which may originally have had different front ends. The only thing to be aware of here is that much data is copyright and may not be used in this way.

One of Jack's favourite discs is the Oxford English Dictionary and, having looked at it, I am tempted to agree. The software runs under Windows and is very easy to use. You can look for words in all sorts of ways and follow things like the language from which the word derives, when it was first used and so on. The whole thing is absolutely fascintating and, even if you have to buy a drive specially for it, will cost less than the paper based OED. It still isn't cheap, however, at £495, but if you can afford it then it's well worth getting. I don't know how much a network licence costs but I do hope that it isn't going to be too expensive; it really is the sort of resource that can enrich education.

Another interesting disc is called Front Page News. This carries the output from a range of American wire services. It's quite useful to look at what appeared from the news agencies on this and then see how, for example, the Times, carried the story. While considering newspapers, don't forget the Northern Echo. This Sunderland daily paper was one of the first (if not the first) to be available on CD ROM. It's a very readable paper but of much higher quality than many local papers and is very cheap.

An amazing and cheap disc is the Desktop Library. I forgot to write down how many books this contains but it certainly filled the disc with data. More information from Apex Software at PO Box 174, Battle, East Sussex, TN33 9AQ (Tel: 0424 830025). Apex also sell a range of interesting discs at relatively low prices.

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Another source of information about CD ROM is the National Council for Educational Technology at Sir William Lyons Road. Science Park , Warwick University, Coventry, CV4 7EZ (Tel: 0203 416994). They have a range of publications suggesting ways to get the best out of Neris, ECCTIS, Newspapers and Encyclopedias at about £4 each.

Some ideas for things to do with CD ROM

Lift off the text from an encyclopedia and increase or decrease the reading age (if you are using Word for Windows version 2 then you can run a grammar check at the end of your work to look at its calculated reading age)

Set two different pupils the same task of finding a piece of information. Make sure that they work at separate times and make a note of the way in which they found their answers. Compare the two routes to show the other pupils that different search strategies can be equally valid.

The production of a newspaper can be very rewarding activity. The working group can be given, as their raw material, the stories that came up on a particular day. The pupils can then be put in the position of the editorial team ona paper. If in addition they have a description of the paper they are going to produce and a clear idea of the audience the paper appeals to then they are in a position to make the editorial decisions about which stories should be included in their paper, which stories suit the pre-occupations of their proprietor and their readers. The task would then be to tailor the material to their audience. To have three or four groups working on the same material would yield some stimulating talking points when they had taken their decisions and produced their papers.

The malleability of the text from the CD ROM offers many opportunities. Most of the newspapers available on disc aer "quality papers" and will not be completely accessible to younger readers. If a piece of text is downloaded from disc to a word processor then it can be changed by one group of pupils to make it suitable for a younger group. The pupils in addition will be working on a text that they find stimulating and they will be working for a real audience.

Travel writers will often have been to places that our pupils have also visited. Ask the pupils to find articles about places in which they have spent some time. Ask them to annotate the articles by adding comments in a word processor.

An important skill for any sub-editor to possess is the ability to express the essence of a story in a few words for the headline. Remove the headlines and present the stories that you want the pupils to work on and ask the pupils to create the headlines.

The current moral dilemmas that preoccupy society are reflected in the content of the paper. Quite often classroom debates are based on emotive responses and are devoid of hard evidence because it is so difficult to obtain quickly. The subjects of capital punishment, abortion, surrogacy, war or peace are all areas that need the underpinning of hard facts. A good paper will have the parliamentary reports, the leaders and, if a subject has seized the minds

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of readers, the letters. Again, in a good paper, there will be a multiplicity of views. Both sides of the argument will be able to find material to support their views.

Look at the idea of censorship. The RSPCA issued a poster drawing attention to the illegal transportation of horses. The poster was banned. The newspapers expressed their views about the banning and these opionions will almost certainly provide a launch pad for the views of the pupils.

Precision of language can be studied in a very intense form in the law reports. One case involving a judgement on whether or not a Fairy liquid bottle could be said to be a prohibited weapon is very instructive in the way that it deals with the exact meaning of "adapted", "constructed", "designed", "intended" and the nuances surrounding all of the words.

Newspapers are biased and that is their strength. Most of them do not make any pretence that they are objective. A good exercise might be to print out some material and ask the pupils whether the material is fact or opinion.

Schools Council Curriculum Bulletin 9 said:

"Information skills cannot be taught once and for all, nor can they be adequately developed within the confines of a single school subject or activity. They have to be introduced, explained in a simple form and then pursued in greater depth year by year and subject by subject ...

A whole school policy on information skills would not only improve pupils' ability to search for and use information, but would also greatly facilitate their learning in other areas. Learning to learn is a powerful aid to improving effectiveness across the curriculum."

It went on to propose a model:

The Nine Question Steps

1. What do I need to do?
   (formulate and analyse need)
2. Where could I go?
   (identify and appraise likely sources)
3. How do I get the information?
   (Trace and locate individual resources)
4. What resources shall I use?
   (Examine, select and reject individual resources)
5. How shall I use the resources?
   (interrogate the resources)
6. What should I make a record of?
   (record and store information)
7. Have I got the information I need?
   (interpret, analyse, synthesize, evaluate)
8. How should I present it?
   (present, communicate)
9. What have I achieved?
   (evaluate)

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S-series 486/33 computer

Les Watson

Research Machines' new S-series 486/33 computer is faintly reminiscent of its old 286 AX range of machines. In contrast to the AX, however, the S-series box has a low profile - it's just 4 inches high - and has contoured styling. Inside is a 33 MHz 486 DX processor, 4Mb of memory, a 120Mb hard disc and a 3.5" floppy drive.

The machine comes with an excellent Super VGA monitor complete with tilt and swivel stand. The usual keyboard and mouse are also supplied, and all this adds up to a computer which is very quick and a delight to use.

When I tested the machine with the *Norton Desktop* software it was rated at over 16 times faster than a standard AT computer, such as the RM AX range (the RM flagship only a few years ago). Do you remember what it was like trying to run the early versions of Windows on those machines? Run seemed hardly the right word. The new S-series is light years away from that tediously slow performance, illustrating the rapid rate of change in desktop computing power. All the more amazing is that this much performance is achieved at no increase in cost.

Research Machines is quick to point out that the S-series 486/33 has not been specifically designed for schools. A cheaper 486SX machine is planned for next December. The current 486DX machine does not run PC186 mode and connection is only possible to RM Netware networks at the moment but other 486 network stations will be available soon.

The S-series is Research Machines first move away from the MCA bus (micro-channel architecture) of the M Series range to the ISA bus (Industry Standard Architecture). This should allow the company to build more competitively priced machines, illustrated by the review machine which is excellent value at £959 plus £225 for the monitor. The price includes Research Machines' three year warranty and technical help-line support. Such support, along with recognised expertise in the education marketplace is likely to become an increasingly important factor for RM as it differentiates the company from the host of others selling similar products at similar prices.

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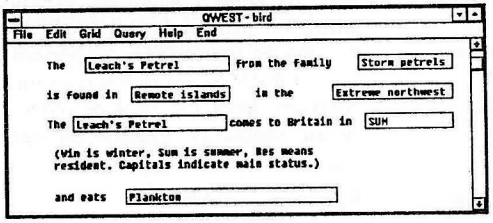
QWEST - bird
File Edit Grid Query Help End
The Leach's Petrel from the family Storm petrels
is found in Remote islands in the Extreme northwest
The Leach's Petrel comes to Britain in SUM
(Win is winter, Sum is summer, Res means resident. Capitals indicate main status.)
and eats Plankton

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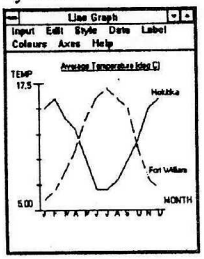

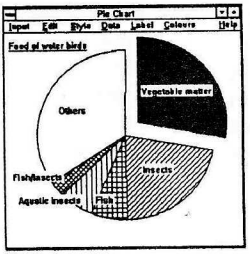

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Phone NOW for details

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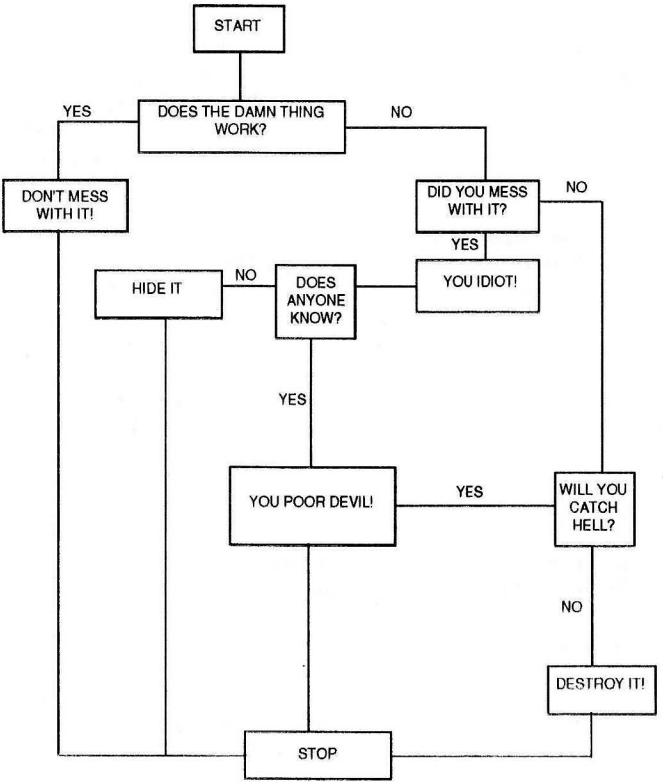
And finally...

prompted by Hugh Wilding

TROUBLESHOOTING FLOWCHART



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	The Willows North Stratford-Upon-Avon
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Communications

I welcome submissions for the magazine from anyone. You don't have to be a great writer to send something in; send a letter or a short tip for the Hints and Tips pages, everything is welcome. If you want to phone and talk something over then please do; even if you aren't sure how to write something down then I can always include your ideas in Hints and Tips or as a plea for help.

I would be particularly pleased to hear from the people who are using RM computers at home; there are quite a lot of you out there. Some of you will be experienced at working with computers and I would be interested to know why you chose RM for home use. Others will have responded to RM's advertising, perhaps because your children use the same computers at school. How are you getting on with your new machine? Did you have any problems getting started? It doesn't matter if you still don't know the answer to the problem- this is how you'll find out - and it doesn't matter if you think that your problem was trivial; remember that there are many other people who are going to be in exactly the same position as you and will welcome the help that you can give.

If you are writing for me then the ideal is to send me a disc produced using Word or Word for Windows but I can cope with any word processor that runs on a Nimbus (I think). If what you are sending is short then a letter on good old fashioned paper is fine.

Finally, we pay for published articles at the rate of £5 per printed page (although all payments are at the Editor's discretion).

Advertising in the Magazine

Full and half page advertisements can be placed in the magazine and details can be obtained from the Advertising Manager. We also take classified ads and members may place free ads for surplus equipment in MicroMart.

Rates

Back Cover **£100** Inside Cover **£60** Full Page **£50** Half Page **£30**

Classified **£5/100 words**

These rates assume black-on-white, camera ready copy. Please avoid dot-matrix output. Typesetting is charged at cost and is additional to the above rates. Classified ads must be pre-paid; cheques payable to *RM User Group*

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Membership Form

Please use capitals

Mr/Mrs/Miss/Ms .....

Job title (if appropriate) .....

Address .....

.....

.....

Postcode .....

I enclose a cheque payable to RMUG/order for £15 (£20 for overseas members). If you are not enclosing a cheque then please send an official order, indicating clearly to whom the invoice should be sent.

In order to serve our members better we like to know something about them and what they do with their computers. The information you give is confidential and we are registered as Data Users under the Data Protection Act.

Are your computers mainly: ☐ standalone ☐ networked

Please tick the areas in which you are interested.

☐ Word processing	☐ Spreadsheets	☐ Databases	☐ High Level Languages
☐ Education	☐ DTP	☐ Art/Graphics	☐ Low Level Languages
☐ Administration	☐ CAL	☐ CDT	☐ Communications
☐ Windows	☐ Other		

Please tick the best description of yourself or your institution

☐ Sole Trader	☐ Limited Co.	☐ Primary School	☐ Charity
☐ Middle School	☐ Secondary Sch	☐ 6th Form College	☐ FE College
☐ HE College	☐ Personal User	☐ University	☐ R&D
☐ Ind. School	☐ Computer Centre	☐ Other	

Please send your form to:

Steve Rochford, RMUG, FREEPOST, London W12 0BR

You may photocopy this form if you do not wish to cut your magazine.

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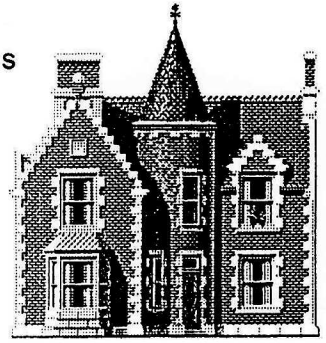
Rembrandt

The most exciting Art and Design program ever created for the Nimbus



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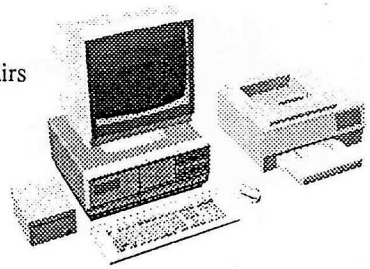

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